

Work Order ID 72190

Tuesday, July 19, 2011 4:09:06 PM



Page 1

Item ID: D2573	Accept		Setup	Start	
Revision ID:				Stop	
Item Name: Saddle, Aft Out 205					
Start Date: 7/19/2011	Start Qty: 12.00		Cust Item ID:		
Required Date: 8/8/2011	Req'd Qty: 12.00		Customer:		
Reference:					

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2573	Rev E								

100	HAAS CNC VERTICAL MACHINING #1	0.00				12	0		
	HAAS 1	Memo	0.00	mk 11/08/11					
HAAS CNC vertical machine #1	Program Batch No. 72190	Double check by: FK							
	1 per Folio FA051 and inspect per attached Dimension Sheets	2-Machine Step							
	No 2 per Folio FA051 and inspect per attached Dimension Sheets	3-Machine							
	Step No 3 per Folio FA051 and insp								

110	CONVENTIONAL MILLING MACHINE	0.00					0		
	Mill Conv	Memo	0.00	mk 11/08/11					
Conventional Milling Machine	Machine keyway as per dwg D2573 & D2574			SL 11-08-15					

120	QC2- Inspect parts off machine FAI/FAIB	0.00				12	0		
	QC	Memo	0.00	mk 11/08/11					
Quality Control				SL 11-08-15					

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			



NOTE: Date & initial all entries

Work Order ID 72190


Tuesday, July 19, 2011 4:09:06 PM





Item ID: D2573 Accept  Setup Start 
Revision ID: Stop 
Item Name: Saddle, Aft Out 205
Start Date: 7/19/2011 Start Qty: 12.00  Cust Item ID:
Required Date: 8/8/2011 Req'd Qty: 12.00  Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start 
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130  QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00		PA 11/08/15		12	0		
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140  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				12	0	11/08/16	
--	---	------------------	--	--	--	----	---	----------	--

150  Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum Memo START TIME: 12:30 FINISH TIME: 1:00	0.00 0.00							
--	--	------------------	--	--	--	--	--	--	--

M 117745

12:30
320°F

12x0 M 11/08/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 72190

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Page 3

Item ID: D2573

Accept



Setup Start



Revision ID:

Stop



Item Name: Saddle, Aft Out 205

Start Date: 7/19/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 8/8/2011 Req'd Qty: 12.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

12 0 11/08/12

170

Identify as per dwg & Stock Location: 434

0.00



Packaging

Memo

0.00

Packaging

11/8/18 12

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/8/18 12

11-08-18
(12)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, July 19, 2011 4:09:14 PM

Page 1

Work Order ID: 72190

Parent Item: D2573

Parent Item Name: Saddle, Aft Out 205



Start Date: 7/19/2011

Required Date: 8/8/2011

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP: 1 As Per RevE 06-01-27 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-007 Saddle Billet		Manufactured	No			100	Each	23.0000	1	12			



Handwritten: F.K. 11/08/09

Location

Loc Qty

Loc Code

MAT045

23

65383

1

65954

4

70680

18

Handwritten: 2271722

Handwritten: 12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 72190
Description: Saddle, Aft Outboard	Part Number: D2573
Inspection Dwg: D2573 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.002	8.002	8.002	8.002		
F	0.490	0.510		.501	.501	.501	.501		
G	0.257	0.262		.258	.258	.258	.258		
H	0.375	0.380		.375	.376	.376	.377		
I	0.490	0.510		.502	.502	.502	.502		
J	1.174	1.184		1.179	1.179	1.179	1.178		
K	0.558	0.578		.569	.569	.569	.568		
L	1.174	1.184		1.179	1.179	1.179	1.178		
M	1.365	1.375		1.369	1.369	1.369	1.368		
N	2.495	2.505		2.500	2.500	2.500	2.499		
O	4.119	4.129		4.123	4.123	4.123	4.122		
P	0.115	0.135		.125	.126	.126	.125		
Q	0.115	0.135		.125	.125	.125	.135		
R	0.240	0.260		.251	.252	.252	.251		
S	0.115	0.135		.128	.127	.127	.126		
T	0.178	0.198		.188	.188	.188	.189		
U	3.210	3.250		3.230	3.230	3.230	3.228		
V	0.230	0.250		.240	.240	.240	.239		
W	0.115	0.135		.128	.128	.128	.128		
X	0.308	0.313		.311	.311	.311	.311		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.366	.366	.366	.365		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.627	.625	.625	.626		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.250	.250	.250	.247		
AE	1.500	1.520		1.512	1.512	1.512	1.512		
AF	0.115	0.135		.125	.125	.125	.128		
AG	0.240	0.280		.250	.250	.250	.260		
AH	0.240	0.260		.250	.250	.250	.249		
AI	2.000	2.020		2.002	2.002	2.002	2.002		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	CML
Date:	11/08/12

Audited by:	BA
Date:	11/08/15

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 72190
Description: Saddle, Aft Outboard		Part Number: D2573
Inspection Dwg: D2573 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	15	26	87	18		
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.001	8.001	8.000	8.001		
F	0.490	0.510		.500	.501	.501	.501		
G	0.257	0.262		.258	.258	.258	.258		
H	0.375	0.380		.377	.377	.377	.377		
I	0.490	0.510		.504	.500	.502	.502		
J	1.174	1.184		1.178	1.178	1.178	1.178		
K	0.558	0.578		.570	.568	.568	.568		
L	1.174	1.184		1.178	1.178	1.178	1.178		
M	1.365	1.375		1.368	1.368	1.368	1.368		
N	2.495	2.505		2.500	2.500	2.500	2.499		
O	4.119	4.129		4.122	4.122	4.122	4.121		
P	0.115	0.135		.126	.126	.126	.125		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.252	.252	.252	.253		
S	0.115	0.135		.126	.126	.126	.125		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		.240	.239	.240	.239		
W	0.115	0.135		.126	.128	.125	.126		
X	0.308	0.313		.311	.310	.311	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.363	.363	.363	.363		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.627	.627	.626	.627		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.248	.248	.249	.248		
AE	1.500	1.520		1.512	1.512	1.512	1.511		
AF	0.115	0.135		.128	.127	.129	.127		
AG	0.240	0.280		.270	.270	.265	.275		
AH	0.240	0.260		.249	.249	.250	.249		
AI	2.000	2.020		2.002	2.002	2.002	2.002		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	aml
Date:	11/08/12

Audited by:	BA
Date:	11/08/15

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD		Work Order: 72190
Description: Saddle, Aft Outboard		Part Number: D2573
Inspection Dwg: D2573 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	X9	210	211	412		
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.002	8.001	8.001	8.001		
F	0.490	0.510		.501	.502	.504	.503		
G	0.257	0.262		.258	.258	.258	.258		
H	0.375	0.380		.377	.377	.376	.376		
I	0.490	0.510		.500	.501	.501	.502		
J	1.174	1.184		1.177	1.177	1.179	1.179		
K	0.558	0.578		.566	.568	.569	.569		
L	1.174	1.184		1.177	1.177	1.179	1.179		
M	1.365	1.375		1.368	1.368	1.369	1.370		
N	2.495	2.505		2.500	2.500	2.499	2.500		
O	4.119	4.129		4.122	4.122	4.122	4.124		
P	0.115	0.135		.125	.126	.125	.125		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.253	.252	.250	.251		
S	0.115	0.135		.125	.127	.126	.124		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		.246	.240	.240	.241		
W	0.115	0.135		.125	.124	.126	.123		
X	0.308	0.313		.310	.310	.311	.311		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.364	.364	.362	.365		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.620	.627	.626	.626		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.249	.248	.250	.250		
AE	1.500	1.520		1.512	1.512	1.513	1.511		
AF	0.115	0.135		.123	.129	.126	.130		
AG	0.240	0.280		.260	.265	.260	.260		
AH	0.240	0.260		.249	.249	.250	.251		
AI	2.000	2.020		2.002	2.002	2.002	2.001		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

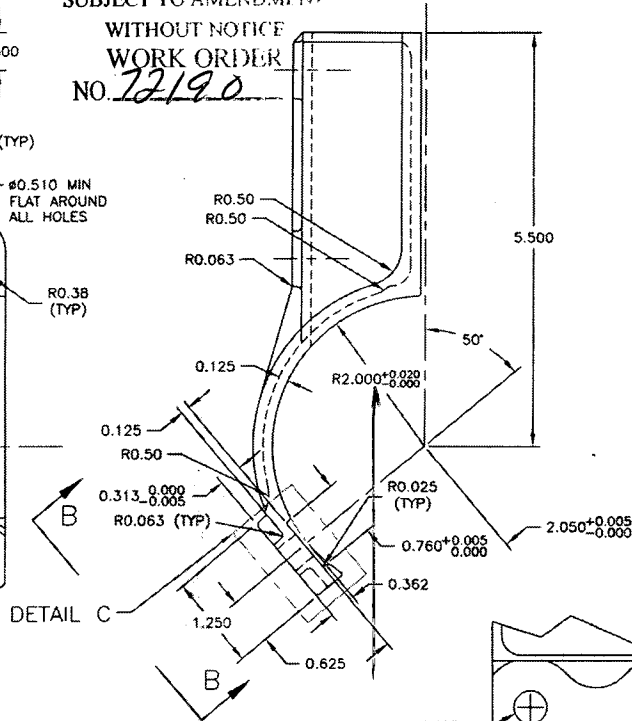
Measured by:	/ SL
Date:	11-08-15

Audited by:	HA
Date:	11/08/15

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
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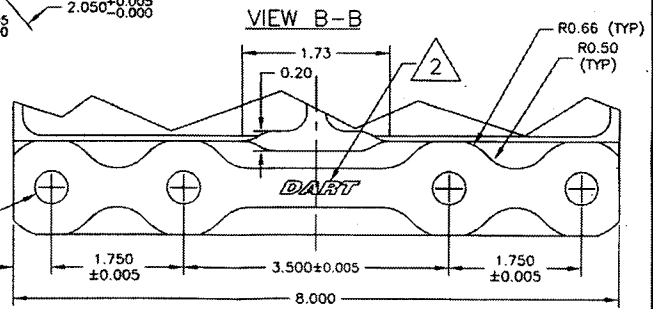
RU-0719

RELEASED
05.12.06 H



MATERIAL: 7075-17351 (Q0-A-250/12)
(REF DART SPEC. D6102-001)
FINISH: ACID ETCH, ALODINE PER DART QSI Q05 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER
DART QSI Q05 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI Q18 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125
- 3 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 4 CHAMFER 0.063" x 45° ALL AROUND
- 5 CHAMFER 0.033" x 45° (SEE DETAIL C) E



E	05.07.13	ADD CHAMFER ON RIDGE NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCRP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE

DESIGN	DS	DRAWN BY	PH	DART	DART AEROSPACE LTD. WILKINSBURY, ONTARIO, CANADA
CHECKED	#	APPROVED	#	DRAWING NO.	REV. E
				D2573	SHEET 1 OF 1
DATE				TITLE	SCALE
05.07.13				OUTER AFT SADDLE	2-3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries